

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Walter Karnstein on 20 July 2009.

The application has been amended as follows:

Claims 1, 4-6, 7, 9, 10, 13, 14, 19-21 have been cancelled.

Claims 2, 3 and 17 have been amended as follows:

2. The ~~drop generator~~ **inhaler** of claim ~~[[1]]~~ **17** wherein ~~[[the]]~~ **a ratio of the chamber thickness to the square root of the transducer area** is less than 0.50.

3. The ~~drop generator~~ **inhaler** of claim ~~[[1]]~~ **17** wherein ~~[[the]]~~ **a ratio of the chamber thickness to the square root of the transducer area** is about 0.35.

17. An inhaler, comprising:

a body including a mouthpiece;

a supply of liquid carried in the body;

a drop generator head mounted to the body in fluid communication with the liquid and having a plurality of chambers therein, each chamber receiving some of the liquid and opening to surrounding air; and

a plurality of heat transducers, one heat transducer residing in each chamber and controllable for instantaneously heating the liquid in the chamber by an amount sufficient to produce a vapor bubble in the chamber for propelling the liquid from the chamber in the form of droplets, each droplet having a volume of less than 100 femtoliters, thereby to facilitate aerosol delivery of the droplets to the alveoli of a user of the mouthpiece; and

wherein each heat transducer has an area and is mounted adjacent to an upper surface in the chamber, and the drop generator includes an orifice opening through an outer surface of the drop generator head, and wherein a distance between the upper surface of the chamber and the outer surface is less than 0.75 times the square root of the **area of the** heat transducer residing in that chamber.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danton DeMille whose telephone number is (571) 272-4974.

The examiner can normally be reached on M-F from 8:30 to 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

24 July 2009

*/Danton DeMille/*

Danton DeMille  
Primary Examiner  
Art Unit 3771